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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,541	04/15/2004	Mark Robert Gibson	920476-95909	8239

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EXAMINER
MAHMOUDZADEH, NIMA

ART UNIT	PAPER NUMBER
2609	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/825,541	GIBSON ET AL.
	Examiner	Art Unit	
	Nima Mahmoudzadeh	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>20-48</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>20-48</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>15 April 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All　b)☐ Some *　c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claims 20, 34, and 48 are objected to because of the following informalities: on

line 7 of claim 20, product "a first node associated with the first endpoint" and method

was used in the claim. On lines 9 and 13 of the same claim, "the second node" has

been used along with method of establishing a path. Also, on lines 20 and 24 of the

same claim, "the third node" is a product that has been used in conjunction with a

method of establishing a path. In claims 34 (lines 8,10,14, 21, and 25) and 48 (lines 10,

12,16, 23,and 27), same informalities exists. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

3.   Claims 20, 34 and 48 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

4.   Claims 20 and 34 recite the limitation "the second and third communication setup

" in line 25. There is insufficient antecedent basis for this limitation in the claim. The

limitation "the second and third communication setup " is not in the preceding claims.

5.   Claim 48 recites the limitation " the second and third communication setup " in

line 27. There is insufficient antecedent basis for this limitation in the claim. The

limitation "the second and third communication setup " is not in the preceding claims.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7.   Claims 20-48 are rejected under 35 U.S.C. 102(e) as being anticipated by Chuah

et al. (US Patent No. 6,735,190)

Regarding claim 20, Chuah et al. teach a method of establishing a path in a

communications network, the path being for use in a communications session between

two endpoints, the method comprising the following steps:

advertising information identifying a plurality of path elements, or tunnels, the

path elements, or tunnels, being between nodes of said communications network

(Column 1, lines 33-40);

a first node (Fig. 4, R1) associated with the first endpoint sending at least one

communication session setup request message, towards a second node associated

with the second endpoint or with an intermediate point in the network (Column 5, lines

42-44),

the second node (Fig. 4, R2) receiving at least two communication session setup request messages (Each node receive control information from adjacent nodes. Column 5, lines 44-46 and column 16, lines 33-40), the received messages having traversed respective different paths in the network (It is inherent that if a path /node fails to perform properly, a different path is going to be selected);

selecting one of said different paths (It is inherent that if a path /node fails to perform properly, a different path is going to be selected);

the second node sending a communication setup response message along said selected path towards said first node (Fig. 4 R2);

establishing a path for use in said communications session by storing items of said advertised information (Column 8, lines 27-34. Fig. 7), the items identifying path elements, or tunnels, associated with a path traversed by said communication setup response message (Fig. 5 and 7) ;

characterised by:

a third node (Fig. 4, R3) receiving the at least one communication session setup message (Column 5, lines 42-52), or a message derived therefrom, and replicating the received message to form at least first and second forked communication session setup messages (Column 9, line 10); and

the third node (Fig. 4, R3) sending the second and third communication setup messages towards said second node along different paths (Depending on the routing

table and path situation the response sent back to R2 could have different route

selections), the at least two communication session setup request messages received

by the second node being (Fig. 4, R2), or being derived from, the second and third

communication setup messages (Fig. 7).

Regarding claim 21, Chuah et al. teach a method according to claim 20,

wherein the at least one communication session setup request message is sent towards

the second node along a partial explicit path between the first and second nodes (Fig.

7).

Regarding claim 22, Chuah et al. teach a method according to claim 21,

wherein the third node sends the second and third communication setup messages in

response to the partial explicit path not defining at least part of a path from the third

node towards the second node (Routing tables are being created based on the data

received from adjacent nodes. Fig. 7).

Regarding claim 23, Chuah et al. teach a method according to claim 22,

wherein the third node determines that the a node on the partial explicit path is not

reachable through a fourth node and in response, does not send a fourth

communication setup message to the fourth node (Fig. 7, it is inherent that if the packet

fails to reach the 4th node, data communication with node 4 is not going to be possible).

Regarding claim 24, Chuah et al. teach a method according to claim 20,

wherein the communications network is a label-switched communications network and

the information identifying a plurality of path elements, or tunnels, comprises labels

(Column 1, lines 33-55).

Regarding claim 25, Chuah et al. teach a method according to claim 20,

wherein said information items are stored at nodes corresponding to endpoints of the

path elements, or tunnels, associated with a path traversed by said communication

setup response message thereby enabling data for the requested communication

session to follow the selected path (It is inherent that routing table which contains

information of the adjacent nodes and keep them updated. Fig. 7).

Regarding claim 26, Chuah et al. teach a method according to claim 20,

wherein records of said respective different paths traversed by said at least two

communication session setup request messages are created as said messages, or

messages from which they derive, traverse the respective different paths (It is inherent

in routing protocols that setup requests can be sent to each nodes from different routes.

Column 5, lines 42-54).

Regarding claim 27, Chuah et al. teach a method according to claim 20,

wherein the first, second and third nodes are management nodes for transmitting

control data and are each associated with respective abstract nodes for transmitting

customer data (Fig.4, both management and abstract nodes are included in R1-R3).

Regarding claim 28, Chuah et al. teach a method according to claim 27,

wherein the path elements, or tunnels, are between abstract nodes (Fig. 4).

Regarding claim 29, Chuah et al. teach a method according to claim 27,

wherein the abstract nodes comprise one or more physical nodes (Fig. 4).

Regarding claim 30, Chuah et al. teach a method according to claim 20,

wherein resources for the communication session are reserved in response to said path

establishment (Column 5, lines 27-36).

Regarding claim 31, Chuah et al. teach a method according to claim 20,

wherein the communication setup request and response messages are based on the

session initiation protocol (Column 5, lines 42-52).

Regarding claim 32, Chuah et al. teach a method according to claim 20,

wherein said respective different paths are ranked according to their respective quality

of service capabilities and the step of selecting one of said different paths is performed

in dependence on said rankings (Column 16, lines 33-56).

Regarding claim 33, Chuah et al. teach a method according to claim 32,

wherein said ranking is established on the basis of a combination of a first ranking

determined by the first node and a second ranking determined by the second node

(Column 16, lines 33-56).

Regarding claim 34, Chuah et al. teach a communications network comprising

two endpoints and a first, second and third node, the first node being associated with

the first endpoint and the second node being associated with the second endpoint or

with an intermediate point in the network, the network being arranged to establish a

path for use in a communications session between the two endpoints by:

advertising information identifying a plurality of path elements, or tunnels, the

path elements, or tunnels, being between nodes of the network (Column 1, lines 33-40);

the first node (Fig. 4, R1)sending at least one communication session setup

request message, towards the second node (Column 5, lines 42-44);

the second node (Fig. 4, R2) receiving at least two communication session setup

request messages (Each node receive control information from adjacent nodes. Column

5, lines 44-46 and column 16, lines 33-40), the received messages having traversed

respective different paths in the network (It is inherent that if a path /node fails to

perform properly, a different path is going to be selected);

selecting one of said different paths (It is inherent that if a path/node fails to perform properly, an alternative path is going to be selected);

the second node sending a communication setup response message along said selected path towards said first node (Fig. 4, R2);

establishing a path for use in said communications session by storing items of said advertised information Column 8, lines 27-34, Fig. 7), the items identifying path elements, or tunnels, associated with a path traversed by said communication setup response message (Fig. 5 and 7);

characterised by:

the third node (Fig. 4, R3) receiving the at least one communication session setup message (Column 5, lines 42-52), or a message derived therefrom, and replicating the received message to form at least first and second forked communication session setup messages (Column 9, line 10); and

the third node (Fig. 4, R3) sending the second and third communication setup messages towards said second node along different paths (Depending on the routing table and path situation the response sent back to R2 could have different route selections), the at least two communication session setup request messages received by the second node being (Fig. 4, R2), or being derived from, the second and third communication setup messages (Fig. 7).

Regarding claim 35, Chuah et al. teach a communications network according to

claim 34, wherein the at least one communication session setup request message is

sent towards the second node along a partial explicit path between the first and second

nodes (Fig. 7).

Regarding claim 36, Chuah et al. teach a communications network according to

claim 35, wherein the third node sends the second and third communication setup

messages in response to the partial explicit path not defining at least part of a path from

the third node towards the second node (Routing tables are being created based on the

data gathered from the adjacent nodes. Fig. 7).

Regarding claim 37, Chuah et al. teach a communications network according to

claim 36, wherein the third node determines that the a node on the partial explicit path is

not reachable through a fourth node and in response, does not send a fourth

communication setup message to the fourth node (Fig. 7, it is inherent that if the packet

fails to reach the 4th node, data communication with node 4 is not going to be possible).

Regarding claim 38, Chuah et al. teach a communications network according to

claim 34, the communications network being a label-switched communications network

and wherein the information identifying a plurality of path elements, or tunnels,

comprises labels (Column 1, lines 33-35).

Regarding claim 39, Chuah et al. teach a communications network according to

claim 34, wherein said information items are stored at nodes corresponding to

endpoints of the path elements, or tunnels, associated with a path traversed by said

communication setup response message thereby enabling data for the requested

communication session to follow the selected path (It is inherent that routing table which

contains information of the adjacent nodes and keep them updated. Fig. 7).

Regarding claim 40, Chuah et al. teach a communications network according to

claim 34, wherein records of said respective different paths traversed by said at least

two communication session setup request messages are created as said messages, or

messages from which they derive, traverse the respective different paths (It is inherent

in routing protocols that setup requests can be sent to each nodes from different routes.

Column 5, lines 42-54).

Regarding claim 41, Chuah et al. teach a communications network according to

claim 34, wherein the first, second and third nodes are management nodes for

transmitting control data and are each associated with respective abstract nodes for

transmitting customer data Fig. 4, both management and abstract nodes are included in

R1-R3) .

Regarding claim 42, Chuah et al. teach a communications network according to

claim 41, wherein the path elements, or tunnels, are between abstract nodes (Fig. 4).

Regarding claim 43, Chuah et al. teach a communications network according to

claim 41, wherein the abstract nodes comprise one or more physical nodes (Fig. 4).

Regarding claim 44, Chuah et al. teach a communications network according to

claim 34, wherein resources for the communication session are reserved in response to

said path establishment (Column 5, lines 27-36).

Regarding claim 45, Chuah et al. teach a communications network according to

claim 34, wherein the communication setup request and response messages are based

on the session initiation protocol (Column 5, lines 42-52).

Regarding claim 46, Chuah et al. teach a communications network according to

claim 34, wherein said respective different paths are ranked according to their

respective quality of service capabilities and the step of selecting one of said different

paths is performed in dependence on said rankings (Column 16, lines 33-56).

Regarding claim 47, Chuah et al. teach a communications network according to

claim 46, wherein said ranking is established on the basis of a combination of a first

ranking determined by the first node and a second ranking determined by the second

node (Column 16, lines 33-56).

Regarding claim 48, Chuah et al. teach a computer program stored on a

computer readable medium, the computer program being for controlling a

communications network comprising two endpoints and a first, second and third node,

the first node being associated with the first endpoint and the second node being

associated with the second endpoint or with an intermediate point in the network, the

computer program controlling the network to establish a path for use in a

communications session between the two endpoints by:

advertising information identifying a plurality of path elements, or tunnels, the

path elements, or tunnels, being between nodes of the network (column 1, lines 33-40);

causing the first node (Fig. 4, R1) sending at least one communication session

setup request message, towards the second node (Column 5, lines 42-44);

causing the second node (Fig. 4, R2) receiving at least two communication

session setup request messages (Each node receive control information from adjacent

nodes. Column 5, lines 44-46 and column 16, lines 33-40), the received messages

having traversed respective different paths in the network (It is inherent that if a path

/node fails to perform properly, a different path is going to be selected);

selecting one of said different paths (It is inherent that if a path /node fails to

perform properly, a different path is going to be selected);

causing the second node sending a communication setup response message

along said selected path towards said first node (Fig. 4,R2);

establishing a path for use in said communications session by storing items of

said advertised information (Column 8, lines 27-34, Fig. 7), the items identifying path

elements, or tunnels, associated with a path traversed by said communication setup

response message (Fig. 5 and 7);

characterised by:

causing the third node (Fig. 4, R3) receiving the at least one communication

session setup message (Column 5, lines 42-52), or a message derived therefrom, and

replicating the received message to form at least first and second forked communication

session setup messages (Column 9, line 10); and

causing the third node (Fig. 4, R3) sending the second and third communication setup

messages towards said second node along different paths (Depending on the routing

table and path situation the response sent back to R2 could have different route

selections), the at least two communication session setup request messages received

by the second node being (Fig. 4, R2), or being derived from, the second and third

communication setup messages (Fig. 7).

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Ghanwani et al. (US Patent No. 6,075,769) teach method and apparatus for

network flow control

Christie (US Patent No. 5,991,301) teaches broadband telecommunications

system

9.   Any responses to this Office Action should be **faxed** to (571) 273-8300 or **mailed**
to:

> Commissioner for Patent
> P.O. Box 1450
> Alexandria, VA 22313-1450
>
> **Hand-delivered responses should be brought to**
> Customer Service Window
> Randolph Building
> 401 Dulany Street
> Alexandria, VA 22314

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Nima Mahmoudzadeh whose telephone number is (571)

270-3527. The examiner can normally be reached on Monday - Friday 7:30am - 5:00

pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Benny Q. Tieu can be reached on (571) 272-7490. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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